I. AMENDMENTS

Amendments to the Specification:

Please amend the specification as follows:

Please replace the paragraph beginning at page 41, line 28 with the following paragraph:

In one embodiment the present invention involves four classes of compounds. Each class is defined by the structure of the ~~uricil~~ uracil base, or modified ~~uricil~~ uracil base present. These classes are ECTA compounds where: 1) the base is a furano-pyrimidinone derivative of uracil; 2) the base is 6-fluorouracil; 3) the base is 4-hydrazone substituted uracil derivative; 4) the base is uracil. The uracil or modified uracil derived base is used to synthesize compounds substituted with toxic leaving groups at the 5 position, attached by an electron conduit tether at this 5 position, and including an appropriate spacer moiety between the electron conduit and the toxic leaving group. The ECTA compounds can be unphosphorylated, 5' monophosphate, 5' phosphodiester, or 5' protected ("masked") deoxyuridines or comparable derivatives of alternative carbohydrate moieties, as described below. Protected 5-substituted deoxyunridine monophosphate derivatives are those in which the phosphate moiety has been blocked through the attachment of suitable chemical protecting groups. Protection of 5-substituted deoxyuridine monophosphate derivatives can improve solubility, facilitate cellular penetration, facilitate passage across the blood-brain barrier, and prevent action of cellular or extracellular phosphatases, which might otherwise result in loss of the phosphate group. In another embodiment, 5-substituted uracil or uridine derivatives are administered to cells containing nucleoside kinase activity, wherein the 5-substituted uracil/uridine derivative is converted to a 5-substituted uridine monophosphate derivative. Uridine derivatives may also be modified to increase their solubility, cell penetration, and/or ability to cross the blood-brain barrier.

Please replace the paragraph beginning at page 55, line 22, with the following paragraph:

Using the procedures mentioned in Example 11, Method II, the following compounds can be obtained in a similar fashion: 5-(4-chloro-1,3-butadienyl)-2'-deoxyuridine (using *N*-chlorosuccinimide in place of *N*-bromosuccinimide in Step B); 5-(4-iodo-1,3-butadienyl)-2'-deoxyuridine (using iodine in sodium ~~iododide~~ iodide in place of *N*-bromosuccinimide.

Please replace the text heading beginning at page 56, line 2, with the following text heading:

5(2-Bromovinyl)-2'-Deoxyuridine Phenyl ~~*N*~~-Methoxy-L-alaninyl Phosphoramidate

Phenyl Methoxy-L-alaninyl Phosphorochloridate

Please replace the text heading beginning at page 56, line 21, with the following text heading:

5-(2-Bromovinyl)-2'-Deoxyuridine Phenyl ~~*N*~~-Methoxy-*L*-alaninyl Phosphoramidate (NB1011)

Please replace the sentence beginning at page 57, line 14, with the following sentence:

Using the methods described in Example 15, the phenyl ~~*N*-methoxy-*L*-alanyl~~ alaninyl phosphoramidates of the following nucleosides were prepared: